06 NOV 59 18562 SECRET

DIRECTOR
25X1A [redacted]

DPD (1-2-3-4-5-6-7-8-9-10) 25X1A [redacted] PRIORITY

S/C (11)

EDF

IN 10941

TOR: 06 NOV 59 18562

25X1A [redacted] 25X1A [redacted] 1266

REF: A. [redacted] 1047 (IN 38762)
25X1A B. [redacted] 0995 (IN 10890)

25X1A MR. [redacted]

1. ARTICLE 351 (610423) WAS CHECKED BUT UNCHANGED FROM REF A. TRIM.

2. DATA:

RPM 70%N2, EGT 250 COCKPIT, 263 MINI-MITE, FUEL/FLOW 1975.
RPM 80%, EGT 278 COCKPIT 295MM, FF 3185.
RPM 85%, EGT 323 COCKPIT 338 MM, FF 4365.
RPM 90%, EGT 398 COCKPIT 415MM, FF 6700.
RPM 95%, EGT 498 COCKPIT 507MM, FF 9750.
RPM 100.1%, EGT 594 COCKPIT 595 MM, FF 12000.
PAM 28.75 INCHES TAM 20 DEGREES CENTIGRADE.

DOCUMENT NO. _____
NO CHANGE IN CLASS. ☐
DECLASSIFIED
CLASS. CHANGED TO: TS S C 2 6 4
NEXT REVIEW DATE: _____
AUTH: HR 70-3
DATE: 2/14/80 REVIEWER: 03[illegible]

3. ENGINE 610423 HAS THE TAILPIPE WITH INCREASED AREA. WE HAVE CHECKED IT WITH A TEMPLATE. THE AREA WAS INCREASED AT 25X1A [redacted] TO PREVENT STALLS.

4. PLEASE ADVISE BY PRIORITY MSG.

END OF MESSAGE

SECRET

2309Z 5 NOV 59 SECRET

DIRECTOR

25X1A [redacted]

DPD (1,2,3,4,5,6,7,8,9,10)

S/C ((11)

HW

TOR: 0618Z 6 NOV 59

ROUTINE

IN 10890

25X1A [redacted] 25X1A [redacted] 0995

REF A. COR: 1047

B. COR: 1043

25X1A

TO [redacted]

RE: TRIM DIFFICULTY IN ART 351

DOCUMENT NO. _____
NO CHANGE IN CLASS. ☐
DECLASSIFIED
CLASS. CHANGED TO: TS S (C) 2011
NEXT REVIEW DATE: _____
AUTH: HR 70-2
DATE: 2/11/81 REVIEWER: 037169

1. IT APPEARS THAT EGT SYSTEM IN 351 IS READING APPROXIMATELY 100 DEGREES LOW. THIS ARTICLE SHOULD NOT BE FLOWN UNTIL IT IS DEFINITELY ESTABLISHED THAT EGT IS CORRECT. USE THE MINI-MITE SYSTEM TO VERIFY OR CHECK COCKPIT EGT.

2. AS SHOWN BY 449 TRIM DATA (REF 25X1A [redacted] J75-10), AT 17C YOU SHOULD NOT EXPECT TO GET 95 PERCENT AT POWER LEVER QUADRANT STOP. RPM AT QUADRANT STOP SHOULD FOLLOW SAME SLOPE AS TRIM CURVE VERSUS OAT. AT 17C, QUADRANT STOP SHOULD GIVE APPROXIMATELY 90 PERCENT TO 91 PERCENT.

3. RPM AND EGT REPORTED FOR 423 ARE NOT COMPATIBLE. THIS COULD NOT BE EXPLAINED BY FUEL CONTROL MALFUNCTION. WHEN 423 TRIM SET AT 99.2 PERCENT RPM YOUR FUEL FLOW MUST HAVE BEEN WELL ABOVE 12,000 PPH. ENGINE CYCLE WILL NOT PERMIT EGT AND RPM COMBINATION YOU DESCRIBE UNLESS EXHAUST AREA WERE GREATLY INCREASED OR COMPRESSOR WERE PRACTICALLY BLOCKED BY CONTAMINATION. IF THIS HAD ANYTHING TO DO WITH CONTROL

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25X1A

MALFUNCTION, THE EGT, RPM, AND FUEL FLOW WOULD ALL BE COMPATIBLE ALTHOUGH AT WRONG LEVEL. PLEASE ADVISE FUEL FLOWS FOR 423 TRIM RUNS IF AVAILABLE.

4. THE THRUST AT 9Ø PERCENT TO 91 PERCENT RPM ON A 17 C DAY IS EQUAL TO OR GREATER THAN THRUST AT 95 PERCENT RPM ON 29C DAY. COLDER DAY YIELDS SUFFICIENT THRUST AT LOWER RPM.

5. FOR REFERENCE IN RIGGING PLA QUADRANT STOP, DRAW STRAIGHT LINE BETWEEN 9Ø PERCENT RPM AT 6ØF AND 95 PERCENT RPM AT 9ØF ON CURVE SIMILAR TO OUR PART POWER TRIM CURVE. [redacted] WILL REVISE HANDBOOK TO GIVE RIGGING DATA VERSUS OAT.

25X1A

6. TRIM CURVE IS EASIER TO USE IF NAMEPLATE IS LEFT OUT. DATA PLATE SPEED VARIATION IS LESS THAN 1/2 PERCENT, AND THIS IS NOT CRITICAL TRIM VARIATION.

7. OVERSPEED LIMIT IS 1ØØ.7 PERCENT BUT IS BEING REVIEWED. WILL ADVI

8. IF EGT SYSTEM IS FOUND WRONG, 423 HAS BEEN OPERATED AT EGT WELL ABOVE MAXIMUM AND MUST BE REMOVED AND RETURNED FOR OVERHAUL.

25X1A

9. OIL BOOST SIGNAL LINE MAY BE RE-ROUTED, AS PER INSTRUCTIONS BY [redacted]. KITS SHOULD BE AVAILABLE FOR PERMANENT CHANGE SHORTLY.

END OF MESSAGE

SECRET